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(54) **TETHER RETRACTION DEVICE**

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(58) **Field of Search** ..... 114/242, 244, 114/247, 253, 254; 244/1 TD; 242/375, 375.1, 375.2, 375.3, 388, 388.6, 388.9, 388.91; 254/277

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(57) **ABSTRACT**

The present invention relates to a tether retraction device having particular utility with multi-line towed arrays. A system for retrieving and deploying a multi-line towed array having a plurality of array lines has at least one tether joinable between two of the plurality of array lines. A tether retraction device is incorporated into at least one of the array lines for retracting the tether. Each tether retraction device has a tether take-up spool, and a spring driven drive means which causes the tether to wind onto the take-up spool when the array is towed at slow speeds and allows deployment of the tether from the take-up spool when tension in the tether caused by tow forces exceeds the spring force applied by the spring driven drive means.

15 Claims, 2 Drawing Sheets